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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,707	06/10/2005	Jean Schmitt	38333	3757
116 7590 10/05/2009 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER				
NGUYEN, STEVEN C				
ART UNIT		PAPER NUMBER		
2443				
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10/05/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/538,707

**Applicant(s)**

SCHMITT ET AL.

**Examiner**

STEVEN C. NGUYEN

**Art Unit**

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- Paper No(s)/Mail Date 06/10/2005

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 06/10/2005 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because reference "O" entitled "Series G: Transmission Systems and Media, Digital Systems and Networks..." does not include a publication date. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

### ***Claim Objections***

1. **Claim 5** is objected to because of the following informalities: the claim recites "establish la quality". Examiner believes this is a typographical error. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**2. Claims 1-3, 5, 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyama et al (US 7,103,148) in view of Palm (US 6,917,647), hereinafter Motoyama and Palm.

**3. Regarding Claim 1**, Motoyama disclosed:

a. Non intrusive control process of an xDSL transmission line from signals and messages exchanged between at least one emitter (1) to at least one receiver (2) during a handshaking procedure, this process being characterised in that it comprises the following steps (*Abstract, Column 3, Lines 16 - 21 state that there are two communication devices interconnected to communicate with each other using xDSL technology*);

b. analysing the spectral power of the xDSL signals exchanged (*Column 3, Lines 33-43 state that the signal to noise ratio of the communication line is measured*);

c. establishing a diagnosis on the state of the line according to the previous steps (*Column 3, Lines 44-63 state that a line quality judging unit monitors the*

*signal to noise ratio and supplies a result of the comparison to a duration monitoring unit).*

Motoyama did not explicitly disclose:

d. detecting and identifying the standardised carriers transmitted via the line to be controlled.

However, Palm disclosed:

e. detecting and identifying the standardised carriers transmitted via the line to be controlled (*Column 12, Lines 14-32 state that each carrier uses a different base frequency which enables the carriers to be differentiated*).

f. The utilization of the readily available detecting and identifying carriers of Palm would have been obvious to one of ordinary skill in the art in view of the teachings of Motoyama since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to be able to tell which carrier had a higher/lower signal to noise ratio.

**4. Regarding Claims 2, 6** the limitations of Claim 1 have been addressed.

Motoyama disclosed:

a. a step consisting of disabling the communication via the wide band channel between the emitter (1) and the receiver (2) during a short instant so as to initialise a new handshaking procedure between the said emitter (1) and the said

receiver (2) (*Column 4, Lines 15-23 state that the communication/handshaking process is interrupted and is reconnected to perform another handshake and an initialization to establish intercommunication with the DSL interface unit*).

**5. Regarding Claim 3**, the limitations of Claim 1 have been addressed. Motoyama did not explicitly disclose:

a. characterised in that the signals exchanged between the emitter (1) and the receiver (2) are defined by the ITU-T G.994.1 standard.

However, Palm disclosed:

b. characterised in that the signals exchanged between the emitter (1) and the receiver (2) are defined by the ITU-T G.994.1 standard (*Column 8, Lines 42-50 state that the transactions and startup mechanisms of the invention follow the methods defined in the ITU-T G.994.1 standard*).

c. The utilization of the readily available signal exchange defined by ITU-T G.994.1 standard of Palm would have been obvious to one of ordinary skill in the art in view of the teachings of Motoyama since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to conform to known standards in the industry.

**6. Regarding Claim 5**, Motoyama disclosed:

a. Control device of an xDSL transmission line (*Column 3, Lines 44-49 state that a line quality judging unit monitors and compares a signal to noise ratio*);

b. said device comprising a measuring unit (14) designed to evaluate the performances, search for the faults and establish la quality of the line and services transmitted (*Column 3, Lines 33-63 state that there is a line quality judging unit and a duration monitoring unit that will compare the results of the signal to noise ratio with the decibel limits and comes up with a result*);

c. a switching module (16) capable of selectively connecting the measuring unit (14) solely to the transmission channels to be controlled and keep active the other channels of the transmission line (*Column 3, Lines 33-63 state that the line quality judging unit assesses the signal to noise ratio of a particular line of communication. In order to do this, the line quality judging unit needs to be connected to the transmission channels in order to figure out the signal to noise ratio*);

d. means for analysing the spectral power of the xDSL signals exchanged (*Column 3, Lines 33-43 state that the signal to noise ratio of the communication line is measured*);

e. and means for establishing a diagnosis on the state of the line according to the analysis of the xDSL signals exchanged (*Column 3, Lines 44-63 state that a line quality judging unit monitors the signal to noise ratio and supplies a result of the comparison to a duration monitoring unit*).

Motoyama did not explicitly disclose:

f. transporting several digital and/or analogue transmission channels,  
g. means for detecting and identifying standardised carriers transmitted via the line to be controlled.

However, Palm disclosed:

h. transporting several digital and/or analogue transmission channels  
*(Column 12, Lines 14-31 and Table 1 show that there are multiple transmission channels that are transported, each with a unique frequency);*

i. means for detecting and identifying standardised carriers  
transmitted via the line to be controlled *(Column 12, Lines 14-32 state that each carrier uses a different base frequency which enables the carriers to be differentiated).*

j. The utilization of the readily available transporting several digital/analog transmission channels and detecting and identifying carriers of Palm would have been obvious to one of ordinary skill in the art in view of the teachings of Motoyama since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to be able to send more data over a communication channel and be able to tell which carrier had a higher/lower signal to noise ratio.

7. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoyama in view of Palm and Pitchforth, JR. (US 2004/0004709), hereinafter Pitchforth.



**8. Regarding Claim 4**, the limitations of Claim 1 have been addressed. Motoyama did not explicitly disclose:

a. measuring the attenuation of the carriers detected to evaluate the distance between the telecommunications centre where the control equipment is installed and the subscriber.

However, Pitchforth disclosed:

b. measuring the attenuation of the carriers detected to evaluate the distance between the telecommunications centre where the control equipment is installed and the subscriber (*Paragraph 27 states that the attenuation is measured to find out the distance that the signal is traveling*).

c. The utilization of the readily available measuring attenuation of the carriers to evaluate distance of Pitchforth would have been obvious to one of ordinary skill in the art in view of the teachings of Motoyama since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, in order to figure out how far the signal must travel to reach the target.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN C. NGUYEN whose telephone number is (571)270-5663. The examiner can normally be reached on Monday through Thursday with alternating Friday 7:30AM - 5:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.C.N./  
Examiner, Art Unit 2443  
09/29/2009

/Tonia LM Dollinger/  
Supervisory Patent Examiner, Art Unit 2443